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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,730	03/24/2004	David W. Schneider	14334	4426
7590 Sally J. Brown AUTOLIV ASP, INC. 3350 Airport Road Ogden, UT 84405	02/08/2007		EXAMINER SPISICH, GEORGE D	
			ART UNIT 3616	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/08/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/807,730	SCHNEIDER, DAVID W.	
	<b>Examiner</b>	<b>Art Unit</b>	
	George D. Spisich	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 23 October 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-68 is/are pending in the application.  
 4a) Of the above claim(s) 8, 16, 18, 29, 37, 40, 47, 57, 59, 65-68 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-7, 9-15, 17, 19-28, 30-36, 38, 39, 41-46, 48-56, 58 and 60-64 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 13 August 2004 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
     Paper No(s)/Mail Date 3/24/04.

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

Applicant's election without traverse of Species 2, shown in Figure 3 in the reply filed on October 23, 2006 is acknowledged.

Claims 8,16,18,29,37,40,47,57,59 and 65-68 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 23, 2006.

Claims 1-7,9-15,17,19-28,30-36,38,39,41-46,48-56,58 and 60-64 read on the elected species and have been examined in this Office Action.

Examiner contends that the subject matter of the diffuser is planar shaped and parallel to the cushion (claims 16,37,47,57 and 68) reads on non-elected Species shown in Figure 4 and not on the Species shown in Figure 3. Examiner points that claims 67 and 68 depend from claim 66 which Applicant has indicated as not reading on the elected Species (believed to read on Fig. 4). Therefore these claims are withdrawn and not examined in this Office Action.

Furthermore, Claims 35 and 36, read on the Species shown in Figure 3 and are examined in this Office Action.

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cover rupturing from the forward edge (which is described as forward direction with respect to the vehicle) (at least claims 9,19,30,41) and U-shaped is not shown, and contradictory to the cover deployment direction as shown in Figure 1, must be shown or the feature(s) canceled from the claim(s). Also, it does not appear that the elected Figure 3 would provide a cover with a tear at the "forward edge" since the tear initiator would tear the cover in a mid portion of the cover and not at the edge. Furthermore, it is not shown how the housing deforms when the occupant hits the cushion (at least claims 15,25,36,46,56,61,63,67). Since the cushion in the elected Figure 3 is mounted near the diffuser of the inflator and near support 46, Examiner is uncertain how the housing would deform when the occupant impacts the cushion, especially due to pressure of inflation gas within the cushion. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

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consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The disclosure is objected to because of the following informalities:

On page 18, line 1, "cushion 148" should be -- cushion 140 --.

Applicant is requested to review the remainder of the specification and correct any inconsistencies.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9,15,19,25,30,36,41,46,56,60-63 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As claimed in claims 9,19,30 and 41, the cover is defined as having a forward edge (which before rupture can only be edge 200). It is unclear how the cover tears

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along the forward edge. It is also unclear how the cover ruptures with the tear initiator and how that would be considered the forward edge of the cover.

As claimed in claims, 15,25,36,46,56,61,63 and 67, it is unclear how the housing shown in the embodiment of Figure 3 deforms when the occupant impacts the cushion (which can only be when the airbag has inflated, not un-inflated, based on the claims), since the mounting of the airbag appears to be in the rigid portion of the housing, and this detail is not shown in any Figure.

With respect to claims 60 and 62, Applicant claims "moving" or "conveying" the inflation gas from the interior portion (of the cushion) rearward and into the folds of the cushion to induce unfolding of the cushion, Examiner states that there is not means/structure shown in Figure 3 to support the limitation that the inflation gas is "moved" or "conveyed". It may be that these claim limitation read on non-elected Figure 4 that handles the gas rearward and toward the folds of the cushion.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17,19,20,22-24,26-29,30,31,34,35,58,60 and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 1 106 446 (cited in Applicant's IDS).

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EP '446 discloses an airbag module for protect an occupant of a vehicle from impact, the airbag module comprising an inflator (8) that produces inflation gas in response to receipt of an activation signal (inherent), a cushion (5) positionable within an instrument panel of the vehicle to receive the inflation gas such that the cushion inflates to provide impact protection and a cover (3) extending along the periphery to conceal the cushion from the occupant, wherein the inflator is positioned to eject the inflation gas directly into an interior portion of the cushion, wherein the interior portion is separated from the cover only by single layer of a material of which the cushion is formed.

With respect to the orientations of a forward or rearward direction, Applicant has not defined these edges and related other structure such that the edges may not be renamed in other interpretations of the reference. For instance, the forward direction may be re-interpreted since the structure having the other interpretation is not longer claimed and the terms "forward" and "rearward" are typically defined by either in relation to the vehicle or the occupant (which is reverse).

The cover tears along a "forward" edge in response to expansion of the cushion, and then rearward of the forward edge to provide a generally U-shaped tear seam. The cover comprises a membrane having a pliable construction (inherent).

The inflator and the cushion are both position proximate the periphery and the inflator is displaced from a center of the cushion primarily along a direction parallel to the periphery, and the inflator is positioned forward of the cushion (in at least Fig. 2). The is a housing (1,1a) positionable to retain the inflator and the cushion (as Applicant's

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invention is similar retained), wherein the housing has a "generally" planar shape oriented "generally" parallel to the cushion.

The cushion comprises a plurality of folds displaced from the interior portion along a direction generally parallel to the periphery.

This arrangement has a "small thickness" (which is a broad term) perpendicular to a periphery of the instrument panel.

The inflator is "displaced" from a center of the cushion primarily along a direction parallel to the periphery.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9, 10, 12-14, 33, 48-52, 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 106 446.

The airbag module of EP '446 has been discussed in the prior rejection. EP '446 has not disclosed the relative dimensions of the airbag, those being the thickness and the area of the cushion (when in the non-inflated state in the instrument panel).

Although the relative dimensions of the airbag in the non-inflated state, those being 150 sq. in., and a thickness of 2 inches, 1 inch, and  $\frac{1}{2}$  inch are consistent with the Figure of EP '446, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to provide the airbag arrangement of EP '446 in the dimensions as claimed for optimizing occupant protection and space savings and since EP '446 shows a thin airbag which would teach the benefit of space savings in an instrument panel airbag arrangement.

The method of manufacture and the method of protecting an occupant would inherently be as Applicant has claimed.

Claims 11,21,32 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP '446 in view of Bauer (USPN 5,082,310).

EP '446 has been discussed in the prior rejection. However, EP '446 does not show a tear initiator member for aiding in the rupturing of the cover to allow for deployment of the airbag during inflation.

Bauer (see especially Figs. 9,10) discloses an airbag arrangement having a tear initiator that is movable (at least as it moves with the cover/door) and that is contacted by the airbag during inflation to increase the stresses on the cover to promote tearing/rupturing of the door.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the airbag arrangement of EP '446 by modifying the cover arrangement by providing a tear initiator between the cushion and the cover as taught by Bauer that is impacted by the cushion during inflation for promoting the rupturing of the cover.

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Claims 15,25,36,38,39,41,42,44-46,56,61 and 63 rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 106 446 in view Damman et al. (USPN 5,647,608).

EP '446 has been discussed in the prior rejection. Although it is considered that any airbag arrangement such as EP '446 would deform to some degree during impact of the occupant with the cushion as inflation gas pressure increases, Examiner is showing the concept with Damman et al.

Damman et al. discloses an airbag arrangement having a housing that deforms (see at least col. 5, lines 40-41) to absorb energy. This arrangement and mounting would inherently deform in an actuated condition and a non-actuated condition.

It would have been obvious that to one of ordinary skill in the art at the time the invention was made to provide a deforming housing in EP '446 as taught by Damman et al. do as to improve the impact protection for the occupant. Again Examiner points that the limitation "deform" would likely be a matter of degree, yet that would not prevent one deforming arrangement from not reading on the claim limitation that the housing deforms.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP '446 in view of Damman et al. as applied to claims 15,25,36,38,39,41,42,44-46,56,61 and 63 above, and further in view of Bauer (USPN 5,082,310).

EP' 446 in view of Damman et al. has been discussed in a prior rejection. However, neither reference disclose a tear initiator.

Bauer (see especially Figs. 9,10) discloses an airbag arrangement having a tear initiator that is movable (at least as it moves with the cover/door) and that is contacted by the airbag during inflation to increase the stresses on the cover to promote tearing/rupturing of the door.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the airbag arrangement of EP '446 in view of Damman et al. by modifying the cover arrangement by providing a tear initiator between the cushion and the cover as taught by Bauer that is impacted by the cushion during inflation for promoting the rupturing of the cover.

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Parker (USPN 5,292,151), Rose (USPN 6,588,793), Bossenmaier et al. (USPN 6,279,942), McDonald (USPN 3,799,573), McGuire et al. (USPN 5,176,400), FR 2 770 815, Rogerson et al. (USPN 5,022,676).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George D. Spisich whose telephone number is (571) 272-6676. The examiner can normally be reached on Monday-Friday 9:00 to 6:30 except alt. Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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February 4, 2007

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